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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,198	05/03/2001	Deborah Ann Haitko	RD-28698	6436
6147	7590	02/05/2004	EXAMINER	
GENERAL ELECTRIC COMPANY GLOBAL RESEARCH CENTER PATENT DOCKET RM. 4A59 PO BOX 8, BLDG. K-1 ROSS NISKAYUNA, NY 12309			COLON, GERMAN	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 02/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/847,198	<b>Applicant(s)</b> HAITKO ET AL.	
	<b>Examiner</b> German Colón	<b>Art Unit</b> 2879	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 November 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4,6-12 and 14-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3,4,8,11,12 and 16 is/are allowed.
- 6) ☒ Claim(s) 1,6,7,9,14,15,17 and 18 is/are rejected.
- 7) ☒ Claim(s) 2 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Response to Amendment***

1. The Amendment, filed on November 04, 2003, has been entered and acknowledged by the Examiner.
2. Addition of claims 17 and 18 has been entered.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 17 is rejected under 35 U.S.C. 102(b) as being anticipated by Forsdyke et al. (US 5,952,780).

Regarding claim 17, Forsdyke discloses a mercury vapor discharge lamp comprising a material selected from the group consisting of silver compounds, gold compounds and combination thereof (see Col. 2, lines 40-47, and Col. 4, lines 1-3); said material being encapsulated and disposed in the interior of said lamp.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 6, 7, 9, 14, 15, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (US 5,801,483) in view of Allen et al. (US 3,858,378).

Regarding claims 1, 17 and 18, Watanabe discloses a low-pressure mercury vapor discharge lamp comprising an end metal cap (see Fig. 1) that is attached to a glass envelope with a sealing composition (see Col. 3, line 19). Watanabe is silent regarding the limitation of the sealing composition comprising a silver compound, a gold compound or combination thereof.

However, in the same field of endeavor, Allen discloses a metal-to-glass sealing composition comprising a silver compound, and teaches this composition to provide a hermetic seal which is suitable for mass production manufacturing processes, which is more thermal shock resistant and more economical than conventional sealing compositions (see Col. 1, lines 52-56, Col. 2, lines 40-42, and Col. 5, lines 41-44). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the sealing composition disclosed by Allen to seal the lamp disclosed by Watanabe, with the purpose of providing a hermetic seal which is suitable for mass production manufacturing processes, which is more thermal shock resistant and more economical than conventional sealing compositions.

Regarding claim 6, Watanabe-Allen discloses the claimed invention except for the limitation of "the silver compound being present in a range between 10-30 mg per lamp". However, it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the silver compound in an amount of 10-30 mg per lamp, since optimization of

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workable ranges is considered within the skill of the art. Further, the dimensions of the lamp and its production process may influence the amount of sealing composition.

Regarding claim 7, Watanabe-Allen discloses a lamp having a sealing composition comprising a silver compound. The Examiner notes that the recitation "elemental mercury is substantially incapable of interacting with ferric and cupric compounds to produce soluble mercury in a presence of said silver compound, gold compound or combination thereof" has not been given patentable weight because is considered an intended used recitation. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations.

Referring to claims 9, 14 and 15, claims 9, 14 and 15 are rejected over the reasons stated in the rejection of claims 1, 6 and 7, respectively.

#### ***Allowable Subject Matter***

7. Claims 3, 4, 8, 11, 12 and 16 are allowed.
8. Claims 2 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

9. Applicant's arguments with respect to claims 1, 6, 7, 9, 14, 15, 17 and 18 have been considered but are moot in view of the new ground(s) of rejection.

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Prior Art of Record***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Duran et al. (US 2,873,510) discloses a seal for a lamp comprising gold or a gold alloy.

Franklin (US 3,302,961) discloses a ceramic-metal seal comprising gold, silver, a gold alloy, a silver alloy, or combination thereof.

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***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to German Colón whose telephone number is 571-272-2451. The examiner can normally be reached on Monday thru Thursday, from 8:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

*gc*

*Patel*  
NIMESHKUMAR D. PATEL  
SUPERVISORY PATENT EXAMINER  
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